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CH DE FR IT LI(71) Applicant: **NATIONAL RESEARCH DEVELOPMENT  
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Procurement Executive Ministry of Defence Patents 1 A  
(4), Room 2014 Empress State Building Lillie Road  
London SW6 1TR(GB)(54) **Character display panels and panel devices.**

(57) A multi-character multi-segment electrically addressable display panel. Character segments (a to h) are defined at each of a number of adjacent locations by the overlap of two sets of electrodes (Figure 6; Figure 7). The electrodes of one set (Figure 7) are each associated with a location and a group of one or more segments [(a, b, g); (c, e); (d, f); (h)]. The electrodes of the other set (Figure 6) extend across each location and are associated with no more than one segment in each segment group [(a); (b, e, f); (c, d, g)]. The panel is addressed using isogonal signals – eg pseudo-random binary sequence coded signals. The panel medium may be of dyed or undyed cholesteric-to-nematic phase change effect liquid crystal material, of low threshold or wide temperature range liquid crystal material.

**EP 0 086 551 A3**



EP 83 30 0122

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl. 4)
X	DE-A-2 727 010 (CITIZEN WATCH) * Page 39, line 24 - page 40, line 25; page 44, lines 1-13; page 47, line 18 - page 48, line 18; figures 22,26,31 *	1-3,9	G 09 G 3/04 G 09 G 3/18
A	---	4,5,8	
Y	US-A-4 264 963 (J.G. LEACH) * Column 5, line 38 - column 6, line 37; figure 4 *	1,9	
Y,D	--- EP-A-0 014 100 (NATIONAL RESEARCH DEVELOPMENT) * Abstract; page 9, lines 1-14; figures 1,5a * & GB-A-2 044 975	1,9	
A	--- GB-A-2 065 354 (STANDARD TELEPHONES AND CABLES) * Page 1, line 68 - page 2, line 30; figure 2 *	1,9	TECHNICAL FIELDS SEARCHED (Int. Cl. 4)  G 09 G 3/00 G 02 F 1/00 G 09 F 9/00
A	--- ELECTRONIC DESIGN, vol. 29, no. 19, September 1981, pages 177-184, Waseca, MN, US; P. BRADSHAW: "Multiplexing makes liquid-crystal displays alphanumeric" * Page 178, paragraph: "Multiplexing and LCDs"; figures 1-4 * -----	1	
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 10-02-1987	Examiner DELPORTE B.P.M.
<b>CATEGORY OF CITED DOCUMENTS</b>			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons  & : member of the same patent family, corresponding document	